

REMARKS

Reconsideration and allowance of the present application based on the following remarks are respectfully requested.

Claims 1-53 are pending in the present application. Claims 3, 4, 18, 20, 22, 23, 36, 39, 42, 43, 46, 47 and 53 have been amended merely to correct typographical errors or to further recite the claimed subject matter without the intention of narrowing the scope of any of the claims.

Applicants are pleased to note that the Examiner indicated that claims 20-37 and 42-45 are allowed and that claims 4-17, 39-41 and 47-52 would be allowable if rewritten in independent form.

Applicants respectfully request the Examiner to return an initialed copy of the form PTO-1449 and the Information Disclosure Statement filed on February 20, 2004 to Applicants with the next Office communication to indicate that the references listed therein have been considered.

Specification

The disclosure was objected to because of a minor informality in paragraph 0053 of the specification. Accordingly, Applicants have amended paragraph 0053 and corrected the word “(de-)magnification” to read “magnification or demagnification.” Therefore, Applicants respectfully request that the objection to the specification be withdrawn.

35 USC § 102 Rejections

Claims 1-3, 18, 19, 38, 46 and 53 were rejected under 35 U.S.C. § 102 (b) as being anticipated by Japanese Patent Application Publication 6-124873 (hereinafter JP ‘873). Applicants respectfully traverse these rejections for at least the following reasons.

JP ‘873 discloses a projection apparatus comprising a projection system 4. The projection system 4 comprises an optical element 7 having a plane or protruding face protruding towards a wafer 2. A liquid reservoir 9 is provided to hold liquid 30 which fills a space between the plane or protruding face of the optical element 7 and the wafer 2 (Abstract of JP ‘873). Figure 1 in JP ‘873 shows a partial cut-away of a portion of the projection system to illustrate a positioning of optical element 7 relative to a housing of the projection system 4. Item 8 in Figure 1 is merely a seal for sealing between the optical element 7 and the housing of the projection system 4 (see paragraph 15 of a machine translation of JP ‘873). JP ‘873 does not disclose, teach or suggest that item 8 is a layer of inorganic material. Thus,

JP '873 does not disclose, teach or suggest a joint comprising an inorganic layer between the optical element 7 and the housing of the projection system 4. Furthermore, JP '873 does not disclose, teach or suggest an inorganic layer providing a fluid tight seal between the optical element 7 and the housing of the projection system 4. Moreover, JP '873 does not disclose, teach or suggest joining optical element 7 of projection system 4 with the housing of the projection system 4 by using an inorganic layer, direct bonding, or both.

Consequently, JP '873 does not disclose, teach or suggest "a joint between an element of the projection system and its support comprises an inorganic layer," as recited in claim 1. JP '873 does not disclose, teach or suggest "a lens support and an inorganic material providing a fluid tight seal between the lens and the lens support," as recited in claim 38. Furthermore, JP '873 does not disclose, teach or suggest "joining an element of a projection system, that in use in a lithographic apparatus comes into contact with a liquid, with its support using an inorganic layer, direct bonding, or both," as recited in claim 46.

Therefore, Applicants respectfully submit that claims 1, 38 and 46, and claims 2-3, 18, 19 and 53 which, respectively, depend from one of claims 1, 38 and 46, are patentable. Thus, Applicants respectfully request that the rejection of claims 1-3, 18, 19, 38, 46 and 53 under § 102(b) over JP '873 be withdrawn.

CONCLUSION

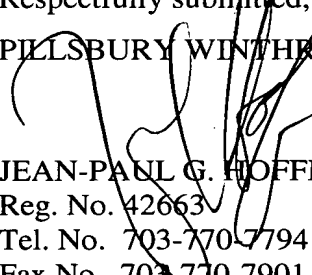
All rejections and objections have been addressed. It is respectfully submitted that the present application is in condition for allowance, and a notice to that effect is earnestly solicited.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Should there be any questions or concerns regarding this application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,

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